`ABSTRACT

A grab for lifting barrels stored in a well includes a grasp system provided for example with suction caps for slightly raising a barrel and movable arms provided with extendable fingers used for embracing the barrel and forming a solid support therefore. The elements are provided with cameras and optical fibers to illuminate and inspect the barrel before lifting it. The grab is provided with a mechanism for centering it on the barrel. The grab can be used for processing nuclear fuels.